



College of Information Studies

University of Maryland Hornbake Library Building College Park, MD 20742-4345

Structured documents and (X)HTML

Week 3

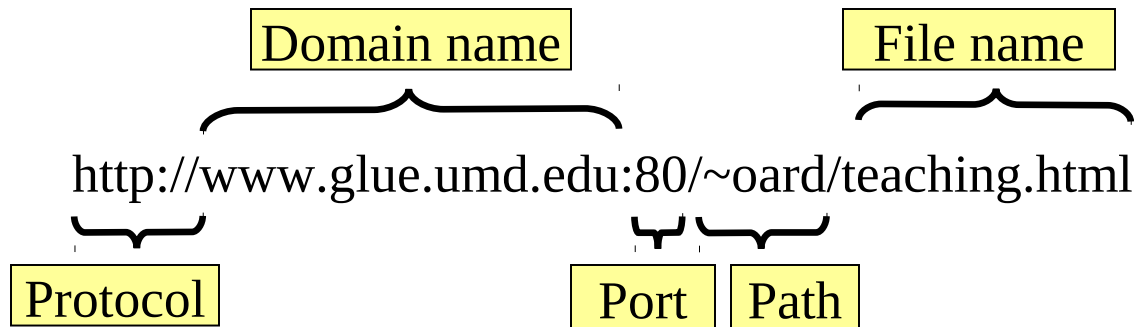
LBSC 690

Web Standards

- URL
 - Where to find the information
- HTTP
 - How to get the information
- HTML
 - How to write and interpret the information

Uniform Resource Locator (URL)

- Uniquely identify Web pages



- Request for directory retrieves “index.html”

HyperText Transfer Protocol (HTTP)

- Send request

```
GET /path/file.html HTTP/1.0  
From: someuser@jmarshall.com  
User-Agent: HTTPTool/1.0
```

- Server response

```
HTTP/1.0 200 OK  
Date: Fri, 31 Dec 2011 23:59:59 GMT  
Content-Type: text/html  
Content-Length: 1354  
<html><body> <h1>Happy New Year!</h1> ... </body>  
</html>
```

HyperText Markup Language (HTML)

- Simple document structure language for Web
- Advantages
 - Adapts easily to different display capabilities
 - Widely available display software (browsers)
- Disadvantages
 - Does not directly control layout

Rendering

- Different devices have different capabilities
 - Desktop
 - PDA
- Rendering maps logical tags to physical layout
 - Controls line wrap, size, font...
 - Place the title in the page border
 - Render `<h1>` as 24pt Times
 - Render `` as bold
- Somewhat browser-dependent
 - Slight differences in Internet Explorer, Firefox, Safari

HTML Document Structure

- “Tags” mark structure
 - `<html>a document</html>`
 - `an ordered list`
 - `<i>something in italics</i>`
- Tag name in angle brackets `<>`
 - Not case sensitive
- Open/Close pairs
 - Close tag is sometimes optional (if unambiguous)
- Element is tag and contents

“Hello World” HTML This is the header

```
<html>  
<head>  
<title>Hello World!</title>  
</head>  
  
<body>  
  
<p>Hello world! This is my first webpage!</p>  
  
</body>  
</html>
```

This is the actual content of the HTML document

Hands On: Graphical Secure FTP

- Connect to “terpconnect.umd.edu”
 - If connecting for the first time, it asks about certificate, accept
- Change directory to “/pub/**USERID**”
- Upload or download files
- You can see these files at:
[http://terpconnect.umd.edu/~**USERID**/](http://terpconnect.umd.edu/~USERID/)

HTML Page Editing Tips

- Edit files on your own machine
 - Upload when you're happy
- Save early, save often, just save!
- Reload browser to see changes
- File naming
 - Don't use spaces
 - Punctuation matters

Hands On:

Learning HTML From Examples

- Use browser to find a page you like
- On the “View” menu select “Source” (in IE9)
 - Opens a window with the source
- Compare HTML source with the Web page
 - Observe how each effect is achieved

Logical Structure Tags

- Head
 - Title
- Body
 - Headers: `<h1>` `<h2>` `<h3>` `<h4>` `<h5>`
 - Lists: ``, `` (can be nested)
 - Paragraphs: `<p>`
 - Tables: `<table>` `<tr>` `<td>` `</td>` `</tr>` `</table>`

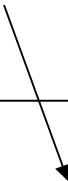
Physical Structure Tags

- Appearance
 - Bold: ``
 - Italics: `<i></i>`
- Font tag
 - Typeface: ``
 - Size: ``
 - Color: ``

(Hyper)Links

Source Document: index.html

```
<html>
<head>
<title>Hello World!</title>
</head>
<body>
<p>Hello world! This is my first webpage!</p>
<p>Click <a href="test.html">here</a> for another page.</p>
</body>
</html>
```



Target Document: test.html

```
<html>
<head>
<title>Another page</title>
</head>
<body>
<p>This is another page.</p>
</body>
</html>
```

Hypertext “Anchors”

- **Internal anchors:** somewhere on the same page
 - ` Students`
 - Links to: `Student Information`
- **External anchors:** to another page
 - `iSchool`
 - ` Douglas W. Oard`

Paths in Anchors

- URL may be complete or relative to current page
- In: `ischool.umd.edu/content/prospective-students`
 - url: `href="http://ischool.umd.edu/content/research"`
 - equivalent to relative path: `href="/content/research"`
 - and even this: `href="research"`
- File name part of URL is case sensitive (on Unix servers)
 - Protocol and domain name are not case sensitive

Images

- `` or ``
 - ``
 - At <http://www.ischool.umd.edu>, equivalent to:
 - ``
 - SRC: can be url or path/file
 - ALT: a text string if not showing image

Image Hyperlinks

- Can use image within anchor to link:
` `

Example:

```
<a href="http://www.umd.edu/">
```

```
  </a>
```

Tables

`<table>`

`<tr><td> eenie </td><td> meenie</td><td> miney</td> </tr>`

`<tr><td> mo </td><td> catch </td><td> a tiger</td> </tr>`

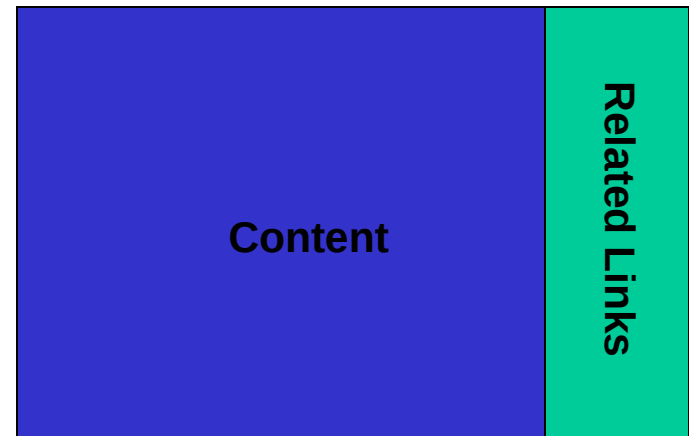
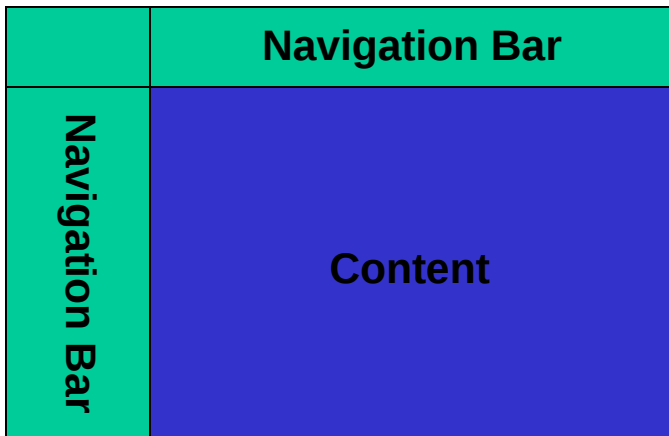
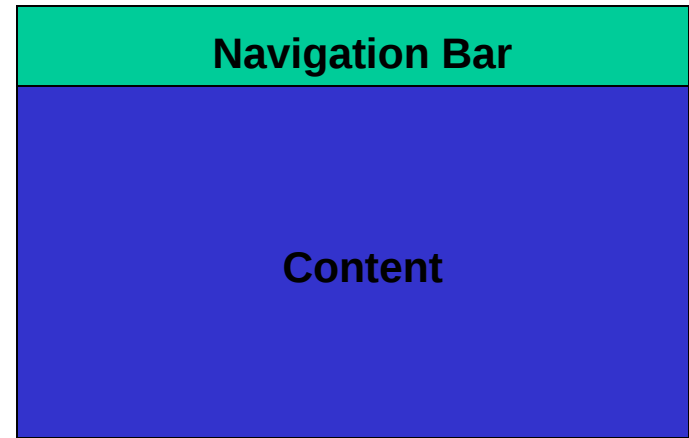
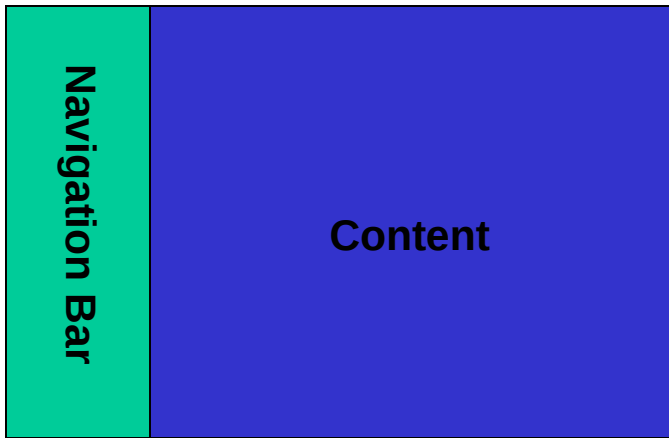
`<tr><td> by </td><td> the </td><td> toe </td> </tr>`

`</table>`

Table Example

```
<table align="center">
<caption align="right">The caption</caption>
  < tr align="LEFT">
    <th> Header1 </th>
    <th> Header2</th>
  </tr>
  <tr><td>first row, first item </td>
    <td>first row, second item</td></tr>
  < tr><td>second row, first item</td>
    <td>second row, second item</td></tr>
</table>
```

Common HTML Pattern: Grid Layouts



Grid Layout: NY Times

The screenshot displays the New York Times Business section in a Mozilla Firefox browser window. The page features a top navigation bar with links like 'HOME PAGE', 'MY TIMES', and 'TODAY'S PAPER'. Below this is the 'Business' section header with a search bar and 'E*TRADE' logo. A secondary navigation bar lists various categories such as 'WORLD', 'U.S.', 'N.Y.', 'REGION', 'BUSINESS', 'TECHNOLOGY', etc. A large advertisement for 'SWAP YOUR RIDE' is prominently displayed, featuring images of various Ford vehicles. The main article, 'Ayn Rand's Literature of Capitalism' by Harriet Rubin, is the central focus, accompanied by a black and white photograph of Ayn Rand. To the right of the article is a sidebar with 'More Articles in Business', an 'Afternoon Update' section, and a 'MOST POPULAR - BUSINESS' list. At the bottom right, there is a 'BASF' advertisement. The browser's address bar shows the URL 'Ayn Rand's Literature of Capitalism - New York Times - Mozilla Firefox'.

Ayn Rand's Literature of Capitalism
By HARRIET RUBIN
Published: September 16, 2007

One of the most influential business books ever written is a 1,200-page novel published 50 years ago, on Oct. 12, 1957. It is still drawing readers; it ranks 388th on [Amazon.com's](#) best-seller list. ("Winning," by [John F. Welch Jr.](#), at a breezy 384 pages, is No. 1,431.)

The book is "Atlas Shrugged," Ayn Rand's glorification of the right of individuals to live entirely for their own interest.

For years, Rand's message was attacked by intellectuals whom her circle labeled "do-gooders," who argued that individuals should also work in the service of others. Her book was dismissed as an homage to greed. [Gore Vidal](#) described its philosophy as "nearly perfect in its immorality."

But the book attracted a coterie of fans, some of them top corporate executives, who dared not speak of its impact except in private. When they read the book, often as college students, they now say, it gave form and substance to their inchoate thoughts, showing there is no conflict between private ambition and public benefit.

"I know from talking to a lot of Fortune 500 C.E.O.'s that 'Atlas Shrugged' has had a significant effect on their business decisions, even if they don't agree with all of Ayn Rand's ideas," said John A. Allison, the chief executive of BB&T, one of the largest banks in the United States.

More Articles in Business »

Afternoon Update
Sign up for a recap of the day's top stories and business headlines, sent weekday afternoons. See Sample [abc@defx.com](#) [Sign Up](#)
[Change E-mail Address](#) | [Privacy Policy](#)

MOST POPULAR - BUSINESS
E-MAILED | BLOGGED

1. Age of Riches: Hedge Funds and Private Equity Alter Career Calculus
2. Ayn Rand's Literature of Capitalism
3. Japanese Housewives Sweat in Secret as Markets Reel
4. A 'Disappointed' Greenspan Lashes Out at Bush's Economic Policies
5. Tell-All PCs and Phones Transforming Divorce
6. Spending: This Glass Is for the Cabernet, That One the Pinot Noir
7. At 25, 'McPaper' Is All Grown Up

Grid Layout: NY Times

The screenshot shows a web browser window displaying the New York Times website. The page is titled "Ayn Rand's Literature of Capitalism - New York Times - Mozilla Firefox". The browser's address bar shows the URL "http://www.nytimes.com/2007/09/15/business/15rand.html". The page layout is a grid with several sections:

- Navigation:** The top navigation bar includes the New York Times logo, a search bar, and links for "Business", "All NYT", and "Search". Below this is a secondary navigation bar with links for "WORLD", "U.S.", "N.Y./REGION", "BUSINESS", "TECHNOLOGY", "ARTS", "STYLE", "TRAVEL", "JOBS", "REAL ESTATE", and "AUTOS".
- Banner Ad:** A large banner advertisement for "SWAP YOUR RIDE" is positioned below the navigation bar. It features the text "HEAR WHAT PEOPLE LIKE YOU HAD TO SAY AFTER DRIVING A FORD FOR ONE WEEK." and "CHALLENGE".
- Content:** The main article is titled "Ayn Rand's Literature of Capitalism" by HARRIET RUBIN, published on September 15, 2007. The article text includes: "One of the most influential business books ever written is a 1,200-page novel published 50 years ago, on Oct. 12, 1957. It is still drawing readers; it ranks 388th on Amazon.com's best-seller list. ('Winning,' by John F. Welch Jr., at a breezy 384 pages, is No. 1,431.)" and "The book is 'Atlas Shrugged,' Ayn Rand's glorification of the right of individuals to live entirely for their own interest." A large image of a woman in a coat is on the left side of the article.
- Another Ad:** A sidebar advertisement for BASF is located on the right side of the article. It features the text "With BASF innovations in agriculture, get ready to pull up to the future." and "FIND OUT HOW.".
- Popular Articles:** A section titled "MOST POPULAR - BUSINESS" is located at the bottom right of the page. It lists several articles, with the top one being "Age of Riches: Hedge Funds and Private Equity Alter Career Calculus".

Grid Layout: ebay

autograph Tom Brady, Autographs-Original, Autographs-Reprints items on eBay.com - Mozilla Firefox

File Edit View History Bookmarks Tools Help

[Shop VICTORIOUS!](#)

Welcome! Sign in or register [Site Map](#)

[Categories](#)
[Motors](#)
[Express](#)
[Stores](#)

[Sneak Peek of what's changing on eBay!](#)

Home > Buy > Search Results for 'autograph Tom Brady'

[All Items](#)
[Auctions](#)
[Buy It Now](#)

[All Categories](#)

[Advanced Search](#)

Search title and description

Related Searches: [tom brady auto](#), [tom brady](#), [reggie bush auto](#), [tom brady sp](#), [tom brady contenders](#)

Narrow Your Results

Sports Mem, Cards & Fan Shop (31)

- Autographs-Original (13)
- Autographs-Reprints (11)
- Cards (5)
- [more ...](#)

Related Guides

- Sports Collectibles
- Graded Sports Cards
- Sports Autographs
- Fan Apparel & Souvenirs
- Sports Cards
- [See all related guides ...](#)

Search Options

Location

31 items found for: autograph Tom Brady [\(save this search\)](#)

[List View](#) | [Picture Gallery](#)

Sort by: [Time: ending soonest](#) [Customize Display](#)

<input type="checkbox"/>	Compare	Item Title	Bids	Price*	Shipping to USA	Time Left ▲
<input type="checkbox"/>		2007 TOPPS TX TOM BRADY AUTOGRAPH & GAME JERSEY 02/15 Brady's regular card #3 in the set is included	14	\$125.00	Not specified	1h 56m
<input type="checkbox"/>		TOM BRADY 8X10 PHOTO AUTOGRAPH AUTO COA GAI CERTIFIED BY THE BEST IN THE BUSINESS !!!	11	\$50.76	\$2.50	3h 27m
<input type="checkbox"/>		Tom Brady New England Patriots Signed Autograph Visor	1	\$9.99	Calculate	4h 34m
<input type="checkbox"/>		TOM BRADY AUTOGRAPH SIGNED 8 X 10 MVP PHOTO COA PATRIOT	-	\$9.99	\$6.50	1d 03h 36m

Grid Layout: ebay

The screenshot displays the eBay website interface, illustrating a grid layout. The page is divided into several distinct sections, each highlighted with a yellow border and labeled with red text:

- Navigation:** Located at the top of the page, it includes the eBay logo, a search bar, and links for "Buy", "Sell", "My eBay", and "Community".
- Banner Ad:** A promotional banner for a Ford challenge, featuring images of cars and the text "SWAP YOUR RIDE" and "HEAR WHAT PEOPLE LIKE YOU HAD TO SAY AFTER DRIVING A FORD FOR ONE WEEK".
- Navigation:** A secondary navigation bar below the banner, containing tabs for "All Items", "Auctions", and "Buy It Now", along with a search bar and a "Navigation" label.
- Search Results:** A table displaying search results for "autograph Tom Brady". The table includes columns for "Item Title", "Bids", "Price*", "Shipping to USA", and "Time Left".
- Related:** A sidebar on the left side of the page, titled "Narrow Your Results", which lists related categories such as "Sports Mem, Cards & Fan Shop" and "Autographs-Original".

Item Title	Bids	Price*	Shipping to USA	Time Left
2007 TOPPS TX TOM BRADY AUTOGRAPH & GAME JERSEY 02/15 Brady's regular card #3 in the set is included	14	\$125.00	Not specified	1h 56m
TOM BRADY 8X10 PHOTO AUTOGRAPH GAT CERTIFIED BY THE BEST IN THE BUSINESS III	11	\$50.76	\$2.50	3h 27m
Tom Brady New England Patriots Signed Autograph Visor	1	\$9.99	Calculate	4h 34m
TOM BRADY AUTOGRAPH SIGNED 8 X 10 MVP PHOTO COA PATRIOT	1	\$9.99	\$6.50	1d 03h 36m

Grid Layout: Amazon

Amazon.com: tiger - Mozilla Firefox

File Edit View History Bookmarks Tools Help

amazon.com Jimmy's Amazon.com See all 41 Product Categories Your Account | Cart | Your Lists | Help |

Gift Certificates | International | Hot New Releases | Bestsellers | Today's Deals | Sell Your Stuff

Search Amazon.com tiger GO Gift Certificates Web Search GO

Category


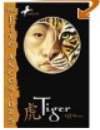
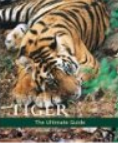

- Any Category
- Books (124,039)
- Sports & Outdoors (31,206)
- Home & Garden (15,975)
- Toys & Games (10,716)
- Apparel (7,925)
- Everything Else (7,221)
- Jewelry & Watches (3,608)
- Automotive (1,126)
- Music (917)
- Home Improvement (769)
- Office Products (725)
- Health & Personal Care (714)
- DVD (453)
- Electronics (396)
- VHS (355)
- Baby (294)
- Video Games (163)
- Software (114)
- Gourmet Food (106)
- Musical Instruments (63)
- Unbox Video Downloads (47)
- Beauty (39)
- Wireless Accessories (37)
- Industrial & Scientific (15)
- Magazine Subscriptions (5)
- Grocery (5)

"tiger"

Did you mean [tigger?](#)


Related Searches: [leopard](#), [tiger woods](#).

Showing Top Results < Previous | Page: 1 2 3 | Next >

-  **Apple Mac OS X Tiger 10.4.6 (Mac DVD)** by Apple Computer (DVD-ROM - May 1, 2006) (Mac OS X)
[Buy new:](#) ~~\$129.00~~ **\$119.99** [26 Used & new](#) from **\$74.99**
In Stock
★★★★☆
Software: [See all 114 items](#)
-  **Tiger (5 Ancestors)** by Jeff Stone (Paperback - Mar 14, 2006)
[Buy new:](#) **\$5.99** [71 Used & new](#) from **\$0.78**
Get it by **Wednesday, Sep 19** if you order in the next **23 hours** and choose one-day shipping.
Eligible for **FREE** Super Saver Shipping.
★★★★☆
Books: [See all 124,039 items](#)
-  **Tiger: The Ultimate Guide** by Valmik Thapar (Hardcover - Jun 2004)
[Buy new:](#) ~~\$39.95~~ **\$26.37** [25 Used & new](#) from **\$7.00**
In Stock
Eligible for **FREE** Super Saver Shipping.
★★★★☆
Books: [See all 124,039 items](#)
-  **Tiger Woods PGA Tour 08** by Electronic Arts (Aug 28, 2007) (Xbox 360)
[Buy new:](#) **\$59.99** [37 Used & new](#) from **\$40.00**
Get it by **Tuesday, Sep 18** if you order in the next **8 minutes** and choose one-day shipping.
Eligible for **FREE** Super Saver Shipping.
★★★★☆
ESRB Rating: Everyone
Video Games: [See all 163 items](#)

Transferring data from ec1.images-amazon.com...

Listmania!



Somatic Psychology Necessities: A list by jess

Grid Layout: Amazon

The screenshot shows the Amazon.com website interface. The top navigation bar includes the Amazon logo, user account links, and a search bar. The search results are displayed in a grid layout with four columns. The first column contains a category list and a 'Listmania!' section. The second and third columns contain search results for 'tiger', including product titles, prices, and images. The fourth column contains a 'Search Results' label. The page is titled 'Amazon.com: tiger - Mozilla Firefox'.

Navigation

amazon.com Jimmy's Amazon.com See all 41 Product Categories Your Account | Cart | Your Lists | Help | Gift Certificates | International Today's Deals | Sell Your Stuff

Search for Amazon.com tiger GO


Navigation


"tiger"


Did you mean **tigger**?

Related Searches: leopard, tiger woods.


Showing Top Results

1.  **Apple Mac OS X Tiger 10.4.6 (Mac DVD)** by Apple Computer (DVD-ROM - May 1, 2006) (Mac OS X)
Buy new: ~~\$129.00~~ **\$119.99** 26 Used & new from \$74.99
In Stock
★★★★☆
Software: See all 114 items

2.  **Tiger (5 Ancestors)** by Jeff Stone (Paperback - Mar 14, 2006)
Buy new: ~~\$9.99~~ **\$5.99** 71 Used & new from \$0.78
Get it by **Wednesday, Sep 19** if you order in the next 23 hours and choose one-day shipping.
Eligible for FREE Super Saver Shipping.
★★★★☆
Books: See all 124,039 items

3.  **Tiger: The Ultimate Guide** by Valmik Thapar (Hardcover - Jun 2004)
Buy new: ~~\$39.95~~ **\$26.37** 25 Used & new from \$7.00
In Stock
Eligible for FREE Super Saver Shipping.
★★★★☆
Books: See all 124,039 items

Search Results

4.  **Tiger Woods PGA Tour 08** by Electronic Arts (Aug 28, 2007) (Xbox 360)
Buy new: ~~\$59.99~~ **\$59.99** 37 Used & new from \$40.00
Get it by **Tuesday, Sep 18** if you order in the next 8 minutes and choose one-day shipping.
Eligible for FREE Super Saver Shipping.
★★★★☆
ESRB Rating: Everyone
Video Games: See all 163 items


Related

Category

Any Category

- Books (124,039)
- Sports & Outdoors (31,206)
- Home & Garden (15,972)
- Toys & Games (10,716)
- Apparel (7,925)
- Everything Else (7,221)
- Jewelry & Watches (3,608)
- Automotive (1,126)
- Music (917)
- Home Improvement (769)
- Office Products (725)
- Health & Personal Care (714)

Listmania!



Somatic Psychology Necessities: A list by jess

Transferring data from ec1.images-amazon.com...

Markup Languages: Writing Wikipedia Pages

- Wikipedia uses MediaWiki software
- MediaWiki has its own markup language
 - <http://en.wikipedia.org/wiki/MediaWiki>
 - MediaWiki syntax vs. Equivalent HTML and Rendered output

Wikipedia Infobox

- Infoboxes summarize important points
 - Types for business, biological taxonomy, video game characters, etc.
- Simple markup language
- Expanded to generate table for infobox

Structured Documents: Wikipedia Page Organization

- Table of Contents
 - We just enter the section titles
 - MediaWiki creates TOC box with internal links
- References
 - We just put citations within text
 - MediaWiki numbers them and creates a section

WYSIWYG

- Anything you can do you can see
 - Everything you can do you can see
- MediaWiki markup helpful for pages
- Need HTML for e.g. representing forms

HTML Editors

- Several are available
 - Adobe Dreamweaver available commercially
 - Microsoft Word
- Tend to use physical layout tags extensively
 - Detailed control can make hand-editing difficult
- You may still need to edit the HTML file
 - Some editors use browser-specific features
 - Some HTML features may be unavailable
 - File names may be butchered when you upload

HTML Validators

- Syntax checking: cross-browser compatibility
 - <http://validator.w3.org>
 - Try it on <http://www.umd.edu> ☹️
- Style checking: Section 508 compliance
 - <http://www.cynthiasays.com/>
 - Try it on <http://www.umd.edu> ☹️

What's Wrong with the Web?

- HTML
 - Confounds structure and appearance (XML)
- HTTP
 - Can't recognize related transactions (Cookies)
- URL
 - Links breaks when you move a file (PURL)

What's a Document?

- Content
- Structure
- Appearance
- Behavior

History of Structured Documents

- Early standards were “typesetting languages”
 - NROFF, TeX, LaTeX, SGML
- HTML was developed for the Web
 - Too specialized for other uses
- Specialized standards met other needs
 - Change tracking in Word, annotating manuscripts, ...
- XML seeks to unify these threads
 - One standard format for printing, viewing, processing

eXtensible Markup Language (XML)

- SGML was too complex
- HTML was too simple
- Goals for XML
 - Easily adapted to specific tasks
 - Rendering Web pages
 - Encoding metadata
 - “Semantic Web”
 - Easily created
 - Easily processed
 - Easily read
 - Concise

Some Basic Rules for XML

- XML is case sensitive
- XML declaration is the first statement
 - `<?xml version="1.0"?>`
- An XML document is a “tree”
 - Must contain one root element
 - Other elements must be properly nested
- **All** start tags must have end tags – ok if same
- Attribute values must have quotation marks
 - `<item id="33905">`
- Certain characters are “reserved”
 - For example: < is used to represent `<`

Really Simple Syndication (RSS)



```
<?xml version="1.0"?>
<rss version="2.0">
<channel>
  <title>Lift Off News</title>
  <link>http://liftoff.msfc.nasa.gov/</link>
  <description>Liftoff to Space Exploration.</description>
  <language>en-us</language>
  <pubDate>Tue, 10 Jun 2003 04:00:00 GMT</pubDate>
  <lastBuildDate>Tue, 10 Jun 2003 09:41:01 GMT</lastBuildDate>
  <docs>http://blogs.law.harvard.edu/tech/rss</docs>
  <generator>Weblog Editor 2.0</generator>
  <managingEditor>editor@example.com</managingEditor>
  <webMaster>webmaster@example.com</webMaster>
  <ttd>5</ttd>
  <item>
    <title>Star City</title>
    <link>http://liftoff.msfc.nasa.gov/news/2003/news-starcity.asp</link>
    <description>How do Americans get ready to work with Russians aboard the International Space Station? They take
      a crash course in culture, language and protocol at Russia's Star City.</description>
    <pubDate>Tue, 03 Jun 2003 09:39:21 GMT</pubDate>
    <guid>http://liftoff.msfc.nasa.gov/2003/06/03.html#item573</guid>
  </item>
</channel>
</rss>
```

See example at <http://www.nytimes.com/services/xml/rss/>

XML: A Family of Standards

- Definition: DTD
 - Known types of entities with “labels”
 - Defines part-whole and is-a relationships
- Markup: XML
 - “Tags” regions of text with labels

Document Type Definition (DTD)

```
<!ELEMENT poem ( (title, author, stanza)* )  
>
```

```
<!ELEMENT title (#PCDATA) >
```

```
<!ELEMENT author (firstname, lastname) >
```

```
<!ELEMENT firstname (#PCDATA) >
```

```
<!ELEMENT lastname (#PCDATA) >
```

```
<!ELEMENT stanza (line+ | linein+) >
```

```
<!ELEMENT line (#PCDATA) >
```

```
<!ELEMENT linein (#PCDATA) >
```

<code>#PCDATA</code>	span of text
<code>a,b</code>	<i>a</i> followed by <i>b</i>
<code>a b</code>	either <i>a</i> or <i>b</i>
<code>a*</code>	0 or more <i>a</i> 's
<code>a+</code>	1 or more <i>a</i> 's

XHTML Example

- View “The Song of the Wandering Aengus”
 - <http://www.umiacs.umd.edu/~oard/teaching/690/spring08/notes/3/xml.htm>
- Built from three files
 - yeats01.xml
 - poem01.dtd
 - poem01.xsl

XML Example

```
<?xml version="1.0"?>
```

```
<!DOCTYPE POEM SYSTEM "poem01.dtd">
```

```
<?xml-stylesheet type="text/xsl" href="poem01.xsl"?>
```

```
<POEM>
```

```
    <TITLE>The Song of Wandering Aengus</TITLE>
```

```
    <AUTHOR> <FIRSTNAME>W.B.</FIRSTNAME>
```

```
                <LASTNAME>Yeats</LASTNAME>
```

```
    </AUTHOR>
```

```
<STANZA>
```

```
    <LINE>I went on to the hazel wood,</LINE>
```

```
    <LINEIN>Because a fire was in my head,</LINEIN>
```

```
    <LINE>And cut and peeled a hazel wand,</LINE>
```

```
</STANZA>
```

```
</POEM>
```

XHTML: Writing HTML as XML

```
<?xml version="1.0" encoding="iso-8859-1"?>
<html xmlns="http://www.w3.org/TR/xhtml1" >
<head>
  <title> Title of text XHTML Document </title>
</head>
<body>
<div class="myDiv">
  <h1> Heading of Page </h1>
  <p> here is a paragraph of text. I will include inside this paragraph
    a bunch of wonky text so that it looks fancy. </p>
  <p>Here is another paragraph with <em>inline emphasized</em>
    text, and <b> absolutely no</b> sense of humor. </p>
  <p>And another paragraph, this one with an  image, and a <br /> line break. </p>
</div>
</body></html>
```

Even More Uses of XML ...

- **CML** – Chemical Markup Language
- **CellML** – biological models
- **BSML** – bioinformatic sequences
- **MAGE-ML** – MicroArray Gene Expression
- **XSTAR** – for archaeological research
- **MARCXML** – MARC in XML
- **AML** – astronomy markup language
- **SportsML** – for sharing sports data

Some Layout Guidelines

- **Contrast**: make different things different
 - to bring out dominant elements
 - to create dynamism
- **Repetition**: reuse design throughout the interface
 - to achieve consistency
- **Alignment**: visually connect elements
 - to create flow
- **Proximity**: make effective use of spacing
 - to group related and separate unrelated elements

Summary

- Learning to build simple Web pages is easy
 - Which is good news for the homework!
- Grid Layout facilitated by tables and CSS
- All documents are structured documents
 - But some expose the structure better than others
- XML is a flexible markup language
 - Complete separation of structure and appearance

Before You Go

On a sheet of paper, answer the following (ungraded) question (no names, please):

What was the muddiest point in today's class?